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Patents	1928-1997

**REPLY TO DES MOINES OFFICE**

April 22, 2005

International Bureau  
World Intellectual Property Office (WIPO)  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

PCT/JPO3/013561  
Re: 92<sup>bis</sup> Letter in WO2004037236

Dear Sir:

In accordance with PCT Rule 92<sup>bis</sup> kindly accept and record the following changes in the Applicant for the above-cited application. The Applicant should be changed to Kemin Foods, L.C. Kemin Foods, L.C. is the owner of rights in this invention in Canada, the United States, and the countries that belong to the EPO, and should be the only Applicant listed.

Should there be any questions or additional information required, please contact the undersigned attorney of record for assistance.

Sincerely,

DAVIS, BROWN, KOEHN, SHORS & ROBERTS, P.C.

Kent A. Herink

"Celebrating 75 Years of Legal Service"

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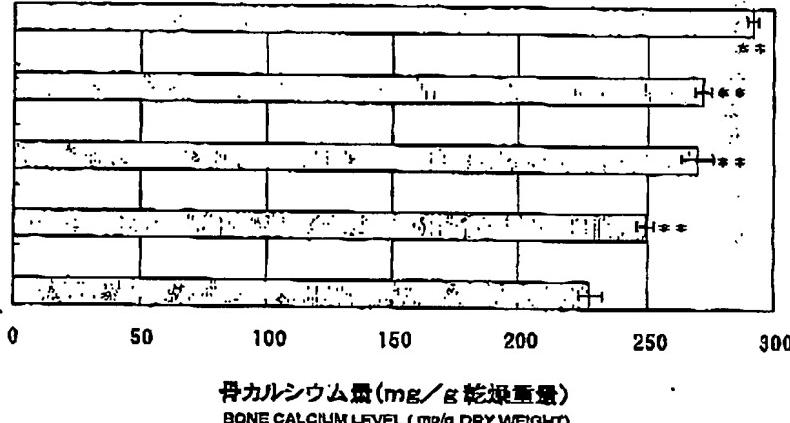
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2002年10月25日 (25.10.2002) JP
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[統葉有]

(54) Title: OSTEOGENESIS PROMOTER CONTAINING  $\beta$ -CRYPTOXANTHIN AS THE ACTIVE INGREDIENT(54) 発明の名称:  $\beta$ -クリプトキサンチンを有効成分とする骨形成促進剤

$\beta$ -クリプトキサンチン( $10^{-6}$ M)  
 $\beta$ -CRYPTOXANTHIN ( $10^{-6}$  M)  
 $\beta$ -クリプトキサンチン( $10^{-6}$ M)  
 $\beta$ -CRYPTOXANTHIN ( $10^{-6}$  M)  
 $\beta$ -クリプトキサンチン( $10^{-7}$ M)  
 $\beta$ -CRYPTOXANTHIN ( $10^{-7}$  M)  
 $\beta$ -クリプトキサンチン( $10^{-8}$ M)  
 $\beta$ -CRYPTOXANTHIN ( $10^{-8}$  M)

対照  
CONTROL骨カルシウム量 (mg/g 乾燥重量)  
BONE CALCIUM LEVEL (mg/g DRY WEIGHT)

(57) Abstract: It is intended to provide an osteogenesis promoter having a remarkable effect of positively promoting osteogenesis and thus preventing/treating bone diseases; a preventive/therapeutic remedy for bone diseases such as osteoporosis having both of an osteogenesis-promoting effect and a bone resorption-inhibiting effect; and a method of screening an active ingredient for preventing/treating bone diseases by using a compound having both of an osteogenesis-promoting effect and a bone resorption-inhibiting effect as a lead compound. It is confirmed that  $\beta$ -cryptoxanthin, which occurs in a large amount in peel and sarcocarp of satsumi orange, has an osteogenesis-promoting effect and a therapeutic effect on bone disease. Thus,  $\beta$ -cryptoxanthin or its composition is used as an osteogenesis promoter, a preventive/therapeutic remedy for bone diseases, a functional food or a food material for preventing/treating bone diseases and a feed composition.

(57) 要約: 積極的に骨形成を促進して骨疾患を予防・治療することができる顕著な効果を有する骨形成促進剤や、骨形成促進作用と骨吸収抑制作用の両作用を有する骨粗鬆症等の骨疾患の予防・治療薬や、骨形成促進作用と骨吸収抑制作用の両作用を有する化合物をリード化合物とする骨疾患に対する予防・治療のための有効成分のスクリーニング方法を提供するものである。温州みかんの表皮と果肉に多く存在する $\beta$ -クリプトキサンチンに骨形成促進作用及び骨疾患治療作用があることを確認し、 $\beta$ -クリプト

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[統葉有]

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